

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

Γ	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	10/564,873	01/17/2006	Richard Fargo	. 3868	
	64779	7590 12/14/2006		EXAMINER	
	CARLSON (400 W MAPL	GASKEY & OLDS		KRUER, STEFAN	
		M, MI 48009		ART UNIT	PAPER NUMBER
				3654	

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		10/564,873	FARGO ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Stefan Kruer	3654			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the	e correspondence address			
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAY INSIGNS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 186(a). In no event, however, may a reply be written and will expire SIX (6) MONTHS from the cause the application to become ABANDO	ON. e timely filed om the mailing date of this communication. NED (35 U.S.C. § 133).			
Status						
1)🖂	Responsive to communication(s) filed on 11 October 2006.					
,	This action is FINAL. 2b) This action is non-final.					
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
4)🖂	Claim(s) <u>1 - 20</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
) Claim(s) is/are allowed.					
-	6) Claim(s) 1 - 20 is/are rejected.					
	7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.					
الــا(ە	are subject to restriction and/or	r cicolon requirement.				
Applicati	on Papers		·			
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on 17 January 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
۵),	1.⊠ Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the priority documents have been received in this National Stage					
	application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachmen						
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summ Paper No(s)/Ma				
3) Infor	mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	5) Notice of Inform 6) Other:				

Art Unit: 3654

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 - 7, 9 and 12 - 13, 15 and 20 are rejected under 35

U.S.C. 102(b) as being anticipated by Fuller et al (6,216,824).

Re: Claim 1, Fuller et al disclose:

- A car (12, Fig. 1),
- A counterweight (32),
- A load bearing member (14) supporting the car and counterweight such that the car and counterweight move in opposite directions,
- A termination (36) associated with at least one end of load bearing member,
- Wherein a portion (49) of the termination moves against a first bias
 (52) of the termination responsive to a tension on the load bearing member below a selected threshold (K₅₂ x₅₂+ K₅₄ x₅₄, when 0 ≤ x ≤ x₅₂ and x₅₄ = 0) and moving against a second, passive bias (54) of the termination responsive to a tension that exceeds the threshold (K₅₂ x₅₂ + K₅₄ x₅₄, when 0 < x ≤ x₅₂ and 0 < x ≤ x₅₄).

Re: Claim 2, Fuller et al disclose:

- The termination includes a termination member (49) and a support member (46),
- Wherein the termination member moves relative to the support member responsive to the tension below the threshold,
- Wherein the support member moves with the terminating member when the tension exceeds the threshold.

Re: Claims 3 - 5, Fuller et al disclose:

Art Unit: 3654

 A damper (54) that resists movement of the support member and wherein the damper partially absorbs the tension,

- · Said damper comprising a mechanical spring,
- Said damper is preloaded, typically known as spring constant, such that the damper prevents the movement of the support member when the tension on the load bearing member is less than the selected threshold.

Re: Claims 6 and 13, Fuller et al disclose:

- Wherein the terminating member and the support member are
 moveable relative to a stationary surface (40) and wherein the
 termination includes a tension member (52) near an end (threaded
 portion with nut) of the terminating member that is distal from the load
 bearing member between the distal end and the support member,
- Said tension member biasing the distal end from the support member,
- A damper or second, passive biasing member (54) acting against an opposite side of the support member between the support member and the stationary surface,
- The damper (54) biasing the support member away from the stationary surface.

Re: Claim 7, Fuller et al disclose their tension member and damper as springs.

Re: Claim 9, Fuller et al disclose their termination supported for movement with the car.

Re: Claim 12, Fuller et al disclose their first and second bias members (52, 54), said members being remote from another.

Re: Claim 15, Fuller et al disclose their first and second biasing members as springs.

Re: Claim 20, Fuller et al disclose their first and second biasing members as hitch devices.

Art Unit: 3654

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8, 14, and 16 - 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller et al, as applied to Claim 2, and in further view of Fuller et al (6,216,824, henceforth referenced as Fuller').

Re: Claims 8, 16 and 17, Fuller et al disclose their support element (40) comprising a plank; however, they are silent regarding a guide structure.

Attention is directed to Fuller' who teach their guide structures (48), whereby said guide structure support said plank and permit movement of said plank toward the stationary surface when the tension exceeds the threshold.

It would have been obvious to one of ordinary skill in the art to modify the invention of Fuller et al with the teaching of Fuller' to provide the support element with a plank and guide structure to inhibit sideward deflection and thereby promote tension and dampening control.

Re: Claim 14, Fuller et al discloses his terminating member having a clamping mechanism (screw on threaded section) as a form of rope termination.

Attention is directed to Fuller' who teach their terminating member having thimble rods (49, Fig. 3, Col. 4, Line 48) to provide a resilient, securing structure.

It would have been obvious to one of ordinary skill in the art to provide the invention of Fuller et al with the thimble rods as taught by Fuller' to properly finish the ends of the rope and provide a compatible means for terminating structures.

Re: Claim 18 and 19, Fuller et al is silent regarding a preloading or stiffness of their biasing members and, as reviewed in Claim 16, does not disclose a guide structure for their support member.

Fuller' teach their first and second biasing means having unique stiffness, whereby his second biasing means offers a "...soft spring..." whereby its

Art Unit: 3654

"...spring constant is less than half that of the rope..." as a means to dampen relatively low frequency (Col. 5, Lines 30 and 55), whereby their first biasing means supports the weight of the elevator car without the need for engagement of the second biasing means (Col. 4, Line 66).

It would have been obvious to one of ordinary skill in the art to modify the invention of Fuller et al with the teachings of Fuller' to provide a hitch device having disparate biasing members of unique stiffness, thereby acting as primary and secondary dampers, to promote vehicular stability for rider comfort.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller et al, as applied to Claim 1, and in view of O'Donnell et al (6,123,176).

Fuller et al are silent regarding the termination supported for movement with the counterweight.

Attention is directed to O'Donnell et al who teach the conventional art of termination (46, Fig. 1) for movement with the counterweight.

It would have been obvious to one of ordinary skill in the art to modify the reference of Fuller et al with the teaching of O'Donnell et al to provide dampening of terminations at both loads of a common load bearing member to minimize jar.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller et al, as applied to Claim 1, and view of Wagatsuma et al (6,234,276).

Re: Claim 11, Fuller et al are silent regarding the termination having a fixed position in relation to a machine causing selective movement of the car; nevertheless, terminations mounted in vicinity of guide rails and shaft surfaces, thereby maintaining a fixed position in relation to the elevator machine, are well known in the art.

For instance, Wagatsuma et al disclose the prior art (Fig. 1) of having terminations (106) fixed in a relative position to the machine (107) mounted in a machine room (19) as well as their inventive feature of terminations mounted on guide rails in elevators without a machine room (Fig. 19).

It would have been obvious to one of ordinary skill in the art to modify the reference of Fuller et al with the teaching of Wagatsuma et al to provide damping of load bearing members in elevators with and without machine rooms.

Art Unit: 3654

Response to Arguments

Applicant's arguments with respect to **Claims 1 and 6** have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that there was no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Yoo disclosed a second, passive bias responsive to a tension that exceeded the threshold his first passive bias. Though the second passive bias is implemented to buffer the elevator car above a set elevation, his invention nevertheless anticipated the passive bias interacting with the termination of the instant invention in accordance with the claim language.

In response to applicant's arguments regarding **Claim 6**, in that the reference of Yoo anticipated a damper on an opposite side of the support member, the modification of Yoo with Fuller et al wherein the damper of Fuller et al biased the support member away from a stationary surface was met.

The references of Yoo and Fuller et al address the biasing of a support member away from a stationary surface and therefore the proposed modification of Yoo by Fuller et al was in keeping with an inventive step.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory

Application/Control Number: 10/564,873 Page 7

Art Unit: 3654

action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Barnes (6,223,862), *Fuller et al* (6,065,569) and Shon (6,315,084) are cited for reference of en elevator tensioning device having thimble rods and mounted in a fixed position relative to an elevator machine; *an active elevator hitch having passive and/or active biasing members of unique stiffness, as well as a passive damper mounted for engagement of the opposite side of a support damper,* and an apparatus for reducing vibration of an elevator car having disparate biasing members of unique stiffness and said apparatus mounted on both the elevator car and counterweight.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 571.272.6928. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866 217.9197 (toll-free).

SHK, 3 December 2006

EILEEN D. LILLIS SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600